



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,943	06/15/2001	Kiril A. Pandelisev	3027-0038A	5959
39083 7590 12/19/2008 CERMAK KENEALY & VAIDYA, LLP 515 EAST BRADDOCK RD SUITE B Alexandria, VA 22314				
EXAMINER				
LOPEZ, CARLOS N				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
12/19/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

09/880,943

Applicant(s)

PANDELISEV, KIRIL A.

Examiner

CARLOS LOPEZ

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 109-122, 128-135 and 241-280 is/are pending in the application.
- 4a) Of the above claim(s) is/are withdrawn from consideration.
- 5) ☒ Claim(s) 109-122, 128-135, 241-250, 256 and 272-279 is/are allowed.
- 6) ☒ Claim(s) 251-255, 257-271, and 280 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. .
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other:

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/15/07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 260-262 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "the heating" lacks antecedent basis. The phrase will be read as referring to the heating during consolidation as recited in claim 257.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 251-255, 257-259, 263-268, 270-271 and 280 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al (US 5,895,515). Ishikawa discloses a VAD method of making optical fiber preforms. The method comprises providing a chamber 400 as shown in figure 5, controlling a dopant material in the chamber as disclosed in Col. 3-4, providing at least one substrate 300 and relatively rotating the substrate as shown in figure 5, and heating the chamber as a result of depositing silica particles of the substrates. As for the claimed fusing and sticking of silica particles, said steps inherently occur during a VAD process. As for the claimed moving at least one preform and substrate in the chamber, figure 5 discloses moving of the preform and substrate in a vertical direction.

As for claim 252 and 280, the silica particles are generated by burners 520 and 510 that are mounted on the wall of the chamber as shown in figure 5.

As for claim 253, the burner generates a silica stream that is directed towards the substrate to thus form a porous preform.

As for claim 254, the claimed dopant gas is CF_4 being introduced by burner 520, the claimed purge gas would be the gas that is un-reacted in the hydrolysis reaction forming the silica particles, the claimed venting and removing gases from the chamber is achieved by exhaust means 420.

As for claim 255, the claimed step of providing a plurality of substrates would be met when additional substrates are provided within the treating chamber 400 to make additional preforms.

As for claim 257, the feeding of silica is stopped in order to consolidate the preform as shown in figures 6-7 and detailed in Col. 5, lines 39ff

As for claim 258, a second layer is deposited onto the fused silica as detailed in the bridging paragraph of col. 7-8 to form a cladding layer.

As for claim 259, 270 and 271, the core is doped with fluorine and the cladding has no doping as detailed in Col. 7-8.

As for claim 263, feeding of the silica when making the cladding is done subsequent to the consolidation of the preform in a chamber.

As for claim 264, figure 5 shows substrate having a hemispherical end portion.

As for claim 265, the claimed pulling mechanism is deemed as element 410.

As for claims 266-268, merely providing additionally apparatuses of Ishikawa would meet the claimed limitations because claim 266 only requires the step of "providing". Consequently each chamber would have its pressure and dopant quantity controlled by the amount of gases fed into each burner 510 and 520.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 260-262 and 269 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al (US 5,895,515) in view of Mansfield (US 4,761,170).

Schneider is silent disclosing the type of heater being used to consolidate the preform. However, Mansfield discloses the use of Rf coil heating to consolidated the preform (See fig. 2) in order to provide a provide better temperature control during consolidation (Col. 6, lines 14ff). Hence, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to have used the heater of Mansfield as the heater of Ishikawa in order to provide better temperature control during the consolidation process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARLOS LOPEZ whose telephone number is (571)272-1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos Lopez/
Primary Examiner
Art Unit 1791